



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,934	03/30/2004	Gen Sasaki	251166US2	2910
22850	7590	03/27/2008	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			GRANT II, JEROME	
		ART UNIT	PAPER NUMBER	
		2625		
		NOTIFICATION DATE	DELIVERY MODE	
		03/27/2008	ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No.	Applicant(s)
	10/811,934	SASAKI, GEN
	Examiner	Art Unit
	Jerome Grant II	2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-19 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
 5) Claim(s) 7-12 and 17 is/are allowed.
 6) Claim(s) ____ is/are rejected.
 7) Claim(s) 4-6, 15 and 16 is/are objected to.
 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date 5/04.
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____.
 5) Notice of Informal Patent Application
 6) Other: _____

1.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Ang.

With respect to claim 1, Ang teaches an image processing apparatus comprising:

An input terminal (input side of element 320) for receiving a plurality of color component signals output in parallel from an image sensor 310; a plurality of defective pixel correction circuits 321-323 for correcting said plurality of color component signals associated with a defective pixel of said image sensor with a predetermined timing; and a defective pixel correction timing generator 370 for generating said predetermined timing used in performing defective pixel correction at a time of input of said plurality of color component signals, wherein said plurality of defective pixel correction circuits (321-323) correct said plurality of color component signals in parallel (see the circuit arrangement of figure 3) at the same time with predetermined timing, all of said plurality of color component signal being associated with said defective pixel.

With respect to claim 13, Ang teaches an image processing system 300 for processing an image signal, comprising: a signal processor 320 for processing a plurality of image signals in parallel said plurality of image signals being read out in parallel from plurality of light receivers (311-313) of an image sensor 310; a plurality of output control circuits 321-323 for outputting said plurality of image signal which are processed by said signal processor to a buss (sample and hold combined circuit of elements 351-353); and a data transfer controller 370 for transferring said plurality of image signals output to said bus.

2.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2, 14 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ang.

Art Unit: 2625

With respect to claim 2, Ang teaches all of the subject matter upon which the claim depends, see the recitation of claim 1, except for the DMA controller as claimed.

Ang teaches a line store select logic 330 which serves the same purpose of the DMA controller.

It would have been obvious to one of ordinary skill in the art to replace the logic circuit 330 with a DMA controller for the purpose of controlling the timing of defective pixels from the timing generator.

With respect to claim 19, Ang teaches an image capture apparatus comprising: an image sensor 310; an image processing system (320, 351-353, 370, 350, 365) for processing an image signal output from said image sensor, wherein said image processing system 300 comprises: a signal processor 320 for processing a plurality of image signals in parallel said plurality of image signals being read out in parallel from plurality of light receivers (311-313) of an image sensor 310; a plurality of output control circuits 321-323 for outputting said plurality of image signal which are processed by said signal processor to a buss (sample and hold combined circuit of elements 351-353); and a data transfer controller 370 for transferring said plurality of image signals output to said bus.

3.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 3 rejected under 35 U.S.C. 102(b) as being anticipated by Mori et al.

Mori et al. teaches an image processing apparatus comprising: an input terminal (input side of circuit 100) for receiving a YUV signal and a plurality of color component signals, said YUV signal including a luminance signal Y and a color difference signal r-y, b-y; a selector 100, for selecting one of said YUV signal and said plurality of color component signals which are input to said selector to provide a plurality of selected signals Y_{out} and C_{out} , and outputting the plurality of selected signals; and a signal processor 6 for processing said plurality of selected signal, wherein, said input terminal is shared by said YUV signal and said plurality of color component signals. Note the YUV is a Y and color component signals U and V.

4.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moberg in view of Mori.

Moberg teaches an image capture apparatus comprising: an image sensor 10; an image processing apparatus 12, for processing an image signal output from said image sensor, wherein said image processing apparatus 18 comprises an input terminal for receiving a YUV (Y, R-yc and B-yc) signal and a plurality of color components signals, said YUV signals included luminance Y and color difference signal R-yc and B-yc.

Moberg does not teach the fifth, sixth and seventh limitations of the claim, but, Mori does.

Mori teaches an image processing apparatus comprising: an input terminal (input side of circuit 100) for receiving a YUV signal and a plurality of color component signals, said YUV signal including a luminance signal Y and a color difference signal r-y, b-y; a selector 100, for selecting one of said YUV signal and said plurality of color component signals which are input to said selector to provide a plurality of selected signals Y_{out} and C_{out} , and outputting the plurality of selected signals; and a signal processor 6 for processing said plurality of selected signal, wherein, said input terminal is shared by

Art Unit: 2625

said YUV signal and said plurality of color component signals. Note the YUV is a Y and color component signals U and V.

It would have been obvious to one of ordinary skill in the art to replace the image processor of Moberg with the image processing apparatus of Mori for the purpose of differentiating, selecting and processing the YUV signals as claimed.

5.

Claims Objected

Claims 4 -6, 15 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6.

Allowed Claims

Claims 7-12 and 17 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerome Grant II whose telephone number is 571-272-7463. The examiner can normally be reached on Mon.-Fri. from 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles, can be reached on 571-272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "JEROME GRANT II".